301.1 - Particle Size (powder and solid forms)

These SRMs are for evaluating and calibrating specific types of particle size measuring instruments, including light scattering, electrical zone flow-through counters, optical and scanning electron microscopes, sedimentation systems, and wire cloth sieving devices.

SRMs 1003c, 1004b, 1017b, 1018b and 1019b each consist of soda-lime glass beads covering a particular size distribution (PSD) range. RM 8010 is a three bottle set of different sands (A, C and D), intended for use in sieving only, and covers the sieve size range from 30 mesh to 325 mesh.

SRM 659 consists of equiaxed silicon nitride particles measured using sedimentation. SRM 1978 consists of granular, irregular shaped zirconium oxide particles measured using sedimentation. SRM 1982 consists of spheroidal particles measured using scanning electron microscopy, laser scattering, and sieving.

SRMs 1690, 1691, 1692, 1963 and 1964 are commercially manufactured monodisperse latex particles in a water suspension. SRMs 1960 and 1961 are monodisperse latex particles in a water suspension produced by the National Aeronautics and Space Administration (NASA). SRM 1965 consists of two different groupings of the SRM 1960 particles mounted on a microscope slide.

RMs 8011, 8012 and 8013 are gold nanoparticles in water.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	659	1003c	1004b	1017b	1018b	1019b	1021	1978	1982	1984	1985
Description	Particle Size Distribution Standard for Sedigraph Calibration	Glass Spheres (Particle Size)	Glass Beads - Particle Size Distribution	Glass (Particle Size)	Glass (Particle Size)	Glass (Particle Size)	Glass (Particle Size)	Zirconium Oxide (Particle Size)	Zirconia Thermal Spray Powder	Thermal Spray Powder - Particle Size Distribution Tungsten Carbide/Cobalt (Acicular)	Thermal Spray Powder - Particle Size Distribution Tungsten Carbide/Cobalt (Spheroidal)
Unit Size	(set (5))	(28 g)	(43 g)	(70 g)	(87 g)	(200 g)	(4 g)	(5 g)	(10 g)	(14 g)	(14 g)
Particle Diameter Distribution (µm)	0.2 to 10	20 to 45 (635 to 325 mesh)	40 to 150 (270 to 120 mesh)	100 to 400 (140 to 45 mesh)	220 to 750 (60 to 25 mesh)	750 to 2450 (20 to 10 mesh)	2 to 12	0.33 to 2.19	10 to 150	9 to 30	18 to 55

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8010	8988
Sand for Sand Sieve Analysis	**Titanium Dioxide Powder - Particle Size Distribution**
(3 x 150 g)	**(6 g)**
A (30 to 100 mesh) C (70 to 200 mesh) D (100 to 325 mesh)	0.1 to 0.5